4.0 ENVIRONMENTAL CONSEQUENCES

This chapter addresses the direct, indirect and cumulative impacts on elements of the human environment from actions proposed in the CDCA Plan Amendment. This chapter is organized by environmental element, followed by a description and comparison of impacts from the relevant plan element alternatives.

Land use plans, such as the CDCA Plan Amendment, developed in accordance with Title 43 Code of Federal Regulations, provide landscape level decisions for managing the BLM-administered public lands. As a result, the impact analysis for land use plans level actions tends to be cumulative by nature.

4.9 Cultural Resources and Native American Concerns

The term "cultural resources" will be used to refer inclusively to archaeological resources and areas reported as sensitive by Native Americans. The term "historic properties" refers specifically to significant cultural resources which have been listed, or determined eligible for listing, on the National Register of Historic Places. Information on file in the California Historical Resources Information System and at the Palm Springs-South Coast Field Office was used to evaluate the potential effects of the Proposed Plan. Additional inventory was conducted in support of this planning effort. Approximately 500 acres of intensive pedestrian cultural resources inventory were completed in the Drop 31 area. No cultural resources were identified as a result of this inventory. Inventory was also conducted along 45 miles of travel routes. A 600 foot corridor, 300 feet from centerline along both sides, was inventoried to evaluate the potential effects to cultural resources of stopping, parking, and vehicle camping along roadways. Thirty new cultural resources were identified. Field checks were performed along approximately 8 miles of travel routes. The purpose of the field checks was to confirm the locations of previously-recorded cultural resources and to update the site records for those resources.

The impacts of the plan alternatives were further evaluated with the assumption that significant, but as-yet unidentified, cultural resources may occur on all lands managed by the BLM. Site specific actions such as construction of facilities will be subject to additional environmental review in accordance with the National Environmental Policy Act, which affords protection to significant cultural resources as prescribed by the National Historic Preservation Act, 36 CFR 800, and other applicable regulations and guidelines. Although avoidance is the preferred approach, mitigation of effect is an acceptable treatment and development activities may therefore result in a net loss of resources.

Wild and Scenic River Eligibility Recommendations. Proposed Plan (Alternatives A, B and C). The recommended eligible rivers contain important archaeological resources and Native American values which contribute to the outstanding resource values of the rivers. Designation of the rivers by Congress would provide additional protection to

cultural resources from surface-disturbing activities. However, increased visitation could result in potential adverse effects such as trampling of archaeological sites by visitors and collection of artifacts and native plant materials. Access to these rivers for Native American cultural purposes would not change with designation. The Proposed Plan would extend protection to the rivers and their resources until a Congressional decision could occur.

<u>No Action Alternative (D)</u>. Deferring eligibility determinations for Wild and Scenic Rivers would not directly affect cultural resources. These resources are protected from the effects of specific actions under the National Historic Preservation Act and other applicable regulations and guidelines.

Visual Resource Management. Proposed Plan (Alternatives A, B and C) and No Action (D). No impacts to cultural resources or Native American concerns would occur as the VRM classifications under the Proposed Plan are based on analyses of existing land uses and quality of landscapes. Areas with a high density of recorded archaeological sites and areas identified as sacred lands generally coincide with areas designated as VRM Class 1 or Class 2. Interim VRM assignments under the No Action Alternative when project proposals are addressed by BLM would likely be the same as under the Proposed Plan.

Land Health Standards and Air Quality. Proposed Plan (Alternatives A, B and C) and No Action (D). Implementation of land health standards may have positive impacts on cultural resources and Native American concerns through the prevention of erosion and the preservation or reintroduction of native plants (Roney 1977; U.S. Department of the Interior 1976). Deer grass and juncus, materials used in traditional basket-making, are native species that are frequently displaced by introduced species such as fountain grass. Specific measures needed to promote land health standards, such as removal of exotic species, which could affect cultural resources will be analyzed on a case-by case basis as part of the NEPA review process.

Multiple-Use Classification. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). The modification of Multiple-Use Classes or retention of existing designations would have little effect on cultural resources. Although Multiple-Use Classes provide broad guidance with respect to permitted uses of the public lands, current laws and regulations (e.g., National Historic Preservation Act, 36 CFR 800, and other applicable regulations), and other actions proposed through this Plan Amendment (e.g., conformance with habitat conservation objectives; designation of special areas [when additional protective measures are developed]; restrictions on motorized-vehicle access, sand and gravel mining, etc.) have a greater effect on cultural resources occurring within the planning area.

Habitat Conservation Objectives. <u>Proposed Plan (Alternatives B and C)</u>. Adoption of habitat conservation objectives would provide additional protection to cultural resources as they call for at least 99% conservation of specific habitat types. These objectives limit surface disturbance and potential impacts to cultural resources. Fostering native

plants presents a potential positive impact by supplying materials for traditional Native American practices. Alluvial Fan/Lowland Scrub and Riparian/Wetlands areas can be expected to contain the greatest density of cultural resources. Cahuilla villages are known to have been situated on alluvial plains. There is also a correlation between the presence of water and cultural resources. Specific actions, such as construction of new utilities within existing utility corridors, would be analyzed through the NEPA process and impacts to significant cultural sites would be avoided or mitigated.

<u>Alternative A and No Action (D)</u>. Protection of cultural resources would be addressed on a case-by-case basis in accordance with the National Historic Preservation Act and other applicable regulations and policies.

Fire Management. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to cultural resources would result from designation or non-designation of fire management categories. The potential for effects to significant cultural resources from prescribed fires will be analyzed through the NEPA process. Specific suppression activities will be evaluated for their potential for adverse effects to significant or sensitive cultural resources to the degree possible given concerns for protection of life and property.

Special Area Designations. Proposed Plan (Alternative A), Alternatives B and C. Designation of lands as Wildlife Habitat Management Areas (WHMAs, Proposed Plan and Alternative B) is an administrative decision specifically aimed at developing special management for important wildlife resources and does not represent a change from the No Action Alternative with regards to cultural resources. Designation of new ACECs or expansion of existing ACECs (Alternatives B and C) could have both positive and negative effects on cultural resources. Designation of an ACEC allows for management actions to protect "identified" resources, including cultural resources. Positive effects would result from adoption of management plans which include limitation of uses to protect cultural resources. However, designation of an area as an ACEC may increase awareness of and visitation to the area and could result in increased impacts.

No Action Alternative (D). Maintaining the current ACEC configuration would continue to have a positive effect on cultural resources in those special areas. Protection of cultural resources outside ACECs would be addressed on a case-by-case basis in accordance with the National Historic Preservation Act and other applicable regulations and policies.

Land Tenure: Exchange and Sale Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to cultural resources will occur. Both the proposed alternatives and the existing CDCA Plan provide for protection of significant cultural resources. Federal agencies must ensure that the significant values of federally owned historic properties will be preserved or enhanced. The BLM cannot dispose of historic properties unless the conservation of those resources are ensured by another agency or entity.

Land Tenure: Acquisition Criteria. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). No impacts to cultural resources will occur. Both the proposed alternatives and the existing CDCA Plan provide for protection of significant cultural resources.

Management of Acquired Lands. Proposed Plan (Alternatives A, B and C) and No Action (D). No impacts to cultural resources will occur. Both the proposed alternatives and the existing CDCA Plan provide for protection of significant cultural resources.

Communication Sites and Utilities. Proposed Plan (Alternative B), Alternatives A, C, and No Action (D). The CDCA Plan calls for the avoidance of sensitive resources whenever possible in the evaluation of future energy and communication site proposals. Alternative D (No Action) enforces the status quo and will have no effect to cultural resources as compared to the CDCA Plan. Alternatives A, B (Proposed Plan), and C would decrease the potential for effects to cultural resources by imposing restrictions on the placement of future communication and utility sites and by applying the habitat conservation standards to proposals within designated conservation areas. The Proposed Plan and Alternative C specifically call for proposed utilities to be designed or mitigation measures imposed to ensure avoidance of impacts to significant cultural resources.

Sand and Gravel Mining. Proposed Plan (Alternative B), Alternatives A and C. Alternatives A, B (Proposed Plan), and C would decrease the potential for effects to cultural resources relative to Alternative D (No Action) by imposing restrictions on the location of future sand and gravel operations or by applying the habitat conservation standards to proposals within designated conservation areas. However, identified sand and gravel mining areas have either been previously inventoried and found not to contain significant cultural resources, or have a low potential for containing historic properties.

<u>No Action Alternative (D)</u>. Protection of cultural resources would be addressed on a case-by-case basis in accordance with the National Historic Preservation Act and other applicable regulations and policies.

Livestock Grazing. Proposed Plan (Alternative A) and No Action (D). Livestock grazing can have a negative impact on cultural resources by encouraging erosion, causing trampling and displacement of artifacts, and introducing non-native plant species (Roney 1977, U.S. Department of the Interior 1976). The Whitewater Canyon ACEC Management Plan identifies Whitewater Canyon as an area with significant Native American values. Although little archaeological inventory has been completed in the grazing allotment, the area has the potential to contain historic properties given its identification as significant by Native Americans and because it contains a reliable water source and plant foods important to the Cahuilla and Serrano. According to records on file in the Palm Springs-South Coast Field Office, nine archaeological sites have been recorded on BLM managed lands within the Whitewater Canyon Allotment. The Proposed Plan would allow any impacts of grazing may be having on cultural resources

to continue until the lessee voluntarily relinquishes the permitted use and preference, at which time the allotment would become unavailable for grazing. The No Action Alternative (D) would allow any negative impacts of grazing on cultural resources to continue once grazing was re-established.

<u>Alternatives B and C.</u> Alternative C would provide for protection of Native American values and historic properties from the effects of livestock grazing. Alternative B would provide the same protection to the northern part of the allotment.

Wild Horse and Burro Program. Proposed Plan (Alternative B), Alternatives A and No Action (D). Horses and burros have the same effects to cultural resources as other livestock. In Palm Canyon significant cultural resources are frequently associated with water sources, which is where livestock will congregate if not otherwise managed. BLM managed lands within the HMA are known to contain significant cultural resources. Horse trails currently cross recorded archaeological sites, resulting in surface disturbance and accelerated soil erosion. The Proposed Plan and Alternatives A and D would allow horses to remain in Palm Canyon and Morongo Canyon HMAs; negative impacts to cultural resources would continue or increase. Under the Proposed Plan, the BLM would be required to ensure that the Agua Caliente Band of Cahuilla Indians develop conservation guidelines to govern management of historic properties on the exchange lands.

<u>Alternative C.</u> Existing animals would be removed from Palm Canyon and further negative impacts to cultural resources that occur as a result of the presence of livestock in sensitive areas would cease.

Motorized Vehicle Area Designations. Alternative A. Approximately half of the Windy Point area has been inventoried and no cultural resources were identified. The remaining area has little potential to contain historic properties. Less than 10% of the eastern Indio Hills site has been inventoried. The western portion has been completely inventoried. No cultural resources were identified as a result of these surveys, however numerous archaeological sites, including prehistoric trail segments, exist within and adjacent to the Indio Hills. The nearby Willow Hole and Edom Hill areas are known to contain significant cultural resource values. No cultural resources surveys have been completed for the Iron Door site, and it also falls within the potentially sensitive Indio Hills. A stratified random sample survey was conducted of the Drop 31 area; no cultural resources were identified. This alternative has the potential to increase the threats to historic properties by increasing the area affected by vehicle use.

<u>Proposed Plan (Alternative B) and Alternative C</u>. These alternatives would provide increased protection to cultural resources by restricting OHV use in sensitive areas to approved routes. The Proposed Plan would allow for OHV use to continue at the Drop 31 site. A stratified random sample survey was conducted of the Drop 31 area; no cultural resources were identified and no significant resources are expected to occur in this area.

No Action Alternative (D). Continued "free-play" OHV activities at the Windy Point, Indio Hills, Iron Door and Drop 31 areas would result in the same impacts to cultural resources as described under Alternative A.

Motorized Vehicle Route Designations. Proposed Plan (Alternative B) and Alternative C. Designation of vehicle routes may have positive or negative impacts on cultural resources. Closure of routes leading to areas containing significant resources would provide an additional measure of protection. However, closure of routes may also lead to increased usage of the routes that remain open. Stopping, parking, and camping are allowed within defined distances of open routes. Surface disturbance from vehicle traffic, construction of fire rings, and collection of artifacts would have a negative impact on significant properties adjacent to open routes. Access to identified Native American gathering or ceremonial areas would not be affected by proposed closures under these alternatives. The location of sensitive resources in the area of the Dunn Road supports closure or limited use of this route: five new archaeological sites were identified as a result of inventories associated with the planning effort. Of these, two are considered to be eligible for listing in the National Register of Historic Places (NRHP). The density of sites in this area suggest that additional significant resources are likely to occur on private parcels along Dunn Road and associated routes.

The Proposed Plan provides a greater degree of protection to cultural resources relative to the No Action alternative; several routes with archaeological sites within 300 feet of centerline are closed under this proposal. Seventeen recorded sites are located adjacent to roads proposed for closure: six of these contain elements that may make them eligible for listing in the NRHP. The majority of the routes which remain open, and may experience increased use, do not have significant sites within their use corridor.

Alternative C would prevent vehicle use near an additional seven archaeological sites. Of these, three sites may be eligible for listing in the NRHP.

<u>Alternatives A and No Action (D)</u>. The same currently available routes would continue to be used by motorized vehicles under both Alternatives A and D, but they would not be designated as open or closed under the No Action Alternative. Several identified cultural resources would not be afforded the same protection as under the Proposed Plan or Alternative C.

Special Recreation Management Area. Proposed Plan (Alternative B), Alternatives A and C. No impacts to cultural resources would occur from the designation of a Special Recreation Management Area, though management prescriptions developed through the Recreation Area Management Plan (RAMP) could provide additional protection depending whether additional restrictions on access are approved and where such restrictions would occur. Specific actions such as construction of visitors' facilities or wildlife guzzlers would be addressed through the NEPA process.

No Action Alternative (D). No direct impacts to cultural resources would occur from not designating the SRMA. Cultural resources may or may not be afforded additional

protection through development of a RAMP, which would not occur under this alternative.

Stopping, Parking and Vehicle Camping. Proposed Plan (Alternatives A and B), Alternatives C and No Action (D). Stopping, parking, and camping may have negative impacts on cultural resources through activities such as surface disturbance from vehicle traffic, construction of fire rings, and collection of artifacts. Limitation of the width within which motorized vehicles may pull off of an approved route decreases the potential for impacts to cultural resources (Proposed Plan and Alternative C). The No Action alternative provides no additional protection of cultural resources relative to the CDCA Plan.

Peninsular Ranges Bighorn Sheep Recovery Strategy. Proposed Plan (Alternative B), Alternatives A, C and No Action (D). Minimizing human disturbance in bighorn sheep habitat would have the concurrent benefit of reducing impacts to archeological sites within the same vicinity. Aggressive management which includes surface-disturbing actions such as the construction of fences and additional watering sites could result in impacts to cultural resources. However, these activities would be addressed on a case-by-case basis in accordance with the National Historic Preservation Act and other applicable regulations and policies.

Hiking, Biking and Equestrian Trails. Proposed Plan (Alternatives A, B and C) and No Action (D). Some trails within the planning area lead to or pass through archaeological sites. Non-motorized use of trails may have a negative impact on cultural resources by increasing visitor traffic to sensitive cultural areas. In some locations current trail users have constructed cairns or used spray paint to guide others to cultural resources. Mountain bikes and horse traffic may increase erosion where trails pass through archaeological sites. The Proposed Plan allows for limits to be placed on non-motorized trail use, including area closures, as needed to protect sensitive resources, whereas all trails would be open for use under the No Action Alternative.

Construction of new trails could have the same negative impacts to cultural resources as above and would also result in new surface disturbance which may damage historic properties. Based on currently available data, depending on its alignment, a new trail south of La Quinta, for example, could pose a potential conflict with cultural resource values: nine archaeological sites occur on BLM managed lands within a corridor identified in the Draft Santa Rosa and San Jacinto Trails Management Plan. Of these nine sites, three appear to contain qualities which make them eligible for listing on the National Register of Historic Places. All of the proposed trail corridors identified in the Draft Trails Management Plan occur in the Lower Sonoran life zone. Based upon data available in the Palm Springs-South Coast Field Office, this zone has a high potential to contain archaeological sites. Proposed trail corridors will be subject to cultural resource studies as part of their suitability analysis. However, specific proposed trail routes would be analyzed through the NEPA process, and mitigation or avoidance would be possible management actions.